AUTHOR: Khrustalev, A.F. and Kogan B.I. SOV/140-58-3-31/34

TITLE: On a Boundary Value Problem for the Biharmonic Equation
Occurring in Elasticity Theory (Ob odnoy granichnoy sadache

dlya bigarmonioheskogo uravneniya, vatrechayushcheyaya v

teorii uprugosti)

PERIODICAL: Izvestiya vysshikh uchebnykh zavedeniy. Matematika, 1958,

Nr 3, pp 241-247 (USSR)

ABSTRACT: The authors consider the solution of such axial symmetric elasticity problems for the infinite circular cylinder which lead to the determination of the stress function $\chi(r,s)$ which in the cylindrical coordinate system satisfies the biharmonic

equation $\nabla^4 \chi(\mathbf{r},\mathbf{z}) = 0$ and the boundary conditions

$$d_r = \frac{\partial}{\partial z}(y\nabla^2 x - \frac{\partial^2 x}{\partial r^2}) = 0$$
 for rel , $0 < z < \infty$

$$v_{rs} = \frac{\partial}{\partial r} \left[(1-y) \nabla^2 \chi - \frac{\partial^2 \chi}{\partial s^2} \right] = 0$$
 for $r=R$, $-\infty < s < \infty$

Card 1/2

On a Boundary Value Problem for the Biharmonic Equation Occurring in Elasticity Theory

SOV/140-58-3-31/34

 $dd_r + Bu = \chi$ for r=R, $-\infty < s < 0$,

where $u = -\frac{1+y}{2} \frac{\partial^2 \chi}{\partial r^2 a}$, $\alpha > 0$, $\alpha > 0$

The solution is obtained by skillful combination of the methods of one of the authors [Ref 2] and of Al'perin [Ref 1]. There are 2 Seviet references.

ASSOCIATION: Khar'kovskiy avtomobil'no-dorozhnyy institut (Kharkov Highway Institute)

SUBMITTED: November 23, 1957

Card 2/2

AUTHOR: Kogan, B.I. (Khar'kov) 80V/24-58-6-20/35

TITLE: The Axi-symmetric Problem in the Theory of Elasticity for a Semi-infinite Medium Consisting of Many Layers (Osesimmetricheskaya zadacha teorii uprugosti dlya mnogosloynogo poluprostranstva)

PERIODICAL: Izvestiya Akademii Nauk SSSR Otdeleniye Tekhnicheskikh Nauk, 1958, Nr 6, pp 111-113 (USSR)

ABSTRACT: Particular cases of the problem have been considered by Marguerre (Ref 1), Shekhter (Ref 2), Shapiro (Refs 3,4) and Burmister (Ref 5). In this note a general solution is proposed for the axi-symmetric problem for a semi-infinite medium consisting of a collection of uniform and non-uniform layers connected by conditions of continuity in the stresses and displacements. Numerical results are introduced for a two-layer system. In order to solve the problem of the stressed state of a non-uniform semi-infinite medium the modulus of elasticity and Poisson's coefficient, which are given as functions of the co-ordinate z, are replaced by step functions: this

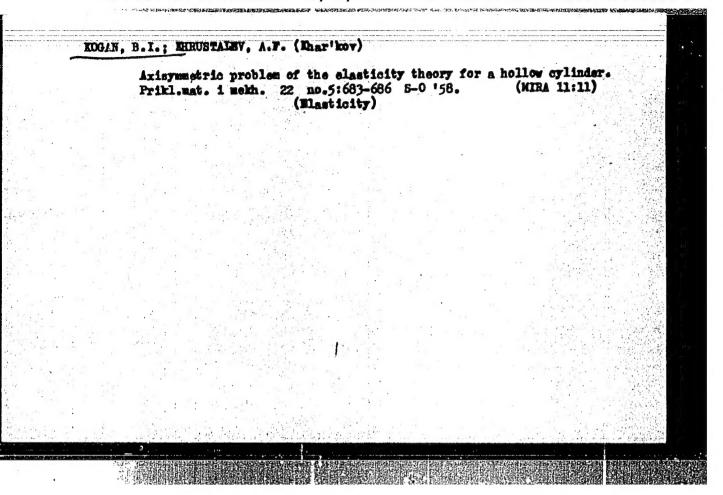
SOV/24-58-6-20/35
The Axi-symmetric Problem in the Theory of Blasticity for a Semi-Infinite Medium Consisting of Many Layers

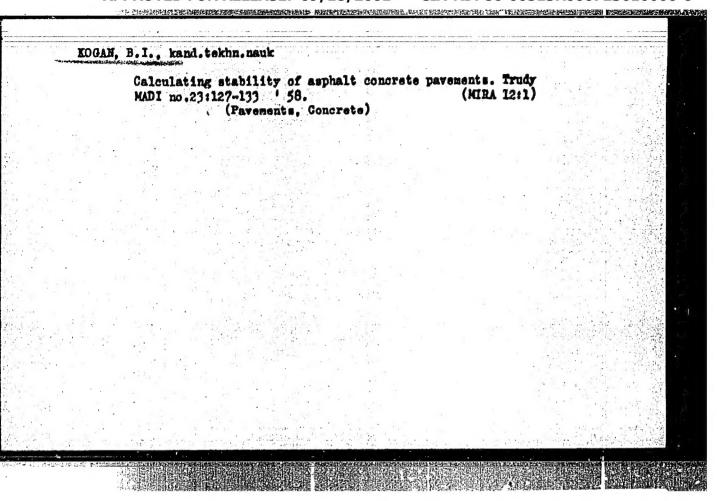
transforms the non-uniform layer into a system of many layers. In the two-layer system considered as an example, the modulus of elasticity and Poisson's coefficient are assumed to be constant and the stress $\gamma(r) = 0$.

There are 2 figures and 6 references (1 German, 1 English and 4 Soviet)

SUBMITTED: Jamuary 13, 1958

Card 2/2





16(1) AUTHORS:

Khrustalev, A.P., Kogan, B.F.

SOV/140-59-4-22/26

TITLE:

On the State of Stress of a Hollow Circular Cylinder

PERIODICAL:

Izvestiya vysshik uchebnykh zavedeniy. Matematika, 1959,

Nr 4 pp 178 - 183 (USSR)

ABSTRACT:

The authors consider axial symmetric problems of elasticity theory of the infinite hollow circular cylinder which lead to the determination of the stress function $\gamma(r,s)$ from the

biharmonic equation $\nabla^4 \varphi(\mathbf{r},\mathbf{z}) = 0$ and from the boundary conditions

 $\sigma_r = 0$ for $r = r_2$, $-\infty < z < \infty$; $r = r_1$, $0 < z < \infty$

 $t'_{rz} = 0$ for $r = r_1$, $r = r_2$, $-\infty < s < \infty$

4.6 + 8u = y for $r = r_1$, $-\infty < z < 0$

The solution is obtained by function-theoretical auxiliary means according to the scheme of [Ref 1,2].

Card 1/2

On the State of Stress of a Hollow Circular

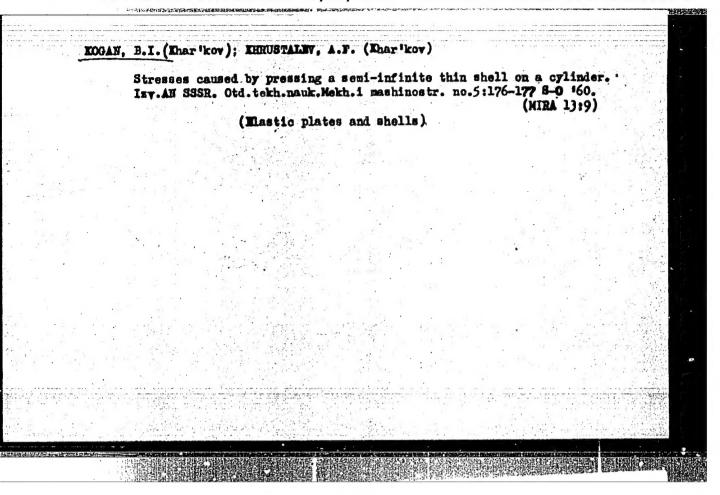
The authors give three special cases (special values of and a).

There are 2 Soviet references.

ASSOCIATION: Khar'kovskiy avtomobil'no-dorozhnyy institut (Khar'kov Automobile Roads Institute)

SUBMITTED: May 23, 1958

Card 2/2



16.3800

S/140/60/000/006/018/018 C111/C222

26.1210 AUTHORS:

Khrustalev, A.F. and Kogan, B.I.

TITLE: On the Distribution of Temperature in a Massive Infinite

Cylinder

Cylinder

PERIODICAL: Izvestiya vysshikh uchebnykh zavedeniy. Matematika, 1960,

No. 6, pp. 239 - 243

TEXT: Let one half of a massive infinite cylinder be in a medium of constant temperature, while the other half radiates the heat into the surrounding space according to Newton's law. The problem consists in the determination of a function T(r,z) which satisfies the harmonic equation in cylindrical coordinates:

 $\nabla^2 T(r, s) = 0$

and the boundary conditions

(2)
$$T = T_1$$
 for $r = R_1 - \infty < x < 0$

(3)
$$\frac{\partial T}{\partial r} + hT = 0$$
 for $r = R$, $0 < z < + \infty$,

Card 1/ 4

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3/140/60/000/006/018/018

Infinite Cylinder On the Distribution of Temperature in

where h is the coefficient of heat exchange.

The author's solution is

The author's solution I hT₁ 0-1+ i
$$\infty$$
 RJ₀(g u)II(u) $= \lambda u_{du}$
(16) T(g , λ) = $-\frac{1}{2\pi i}$ $= 1 \infty$ u hRJ₀(u) - u J₁(u)

where

(11) II(u) =
$$\int_{1}^{\infty} \frac{1}{\left(1 - \frac{u}{b_n}\right)}$$

and an are the posit

and
$$a_n$$
 are the position $hRJ_0(u) - uJ_1(u) = 0$

and b are the positive roots of the equation

(13)
$$J_o(u) = 0$$
,

$$\lambda = \frac{\pi}{R}$$
, $\beta = \frac{r}{R}$

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3/140/60/000/006/018/018 C111/C222

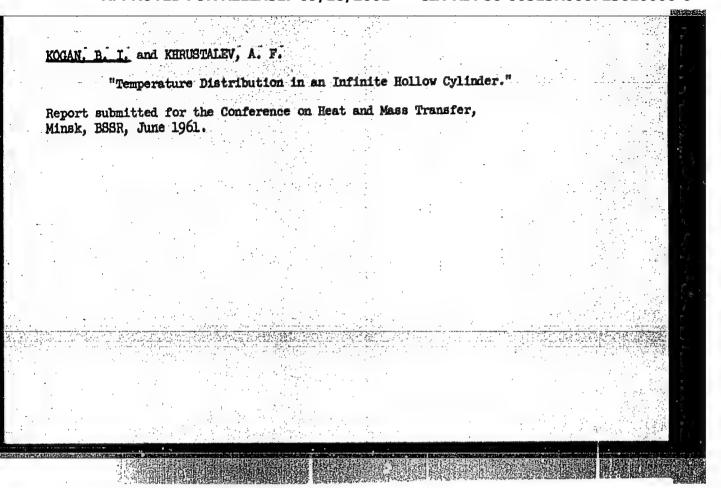
On the Distribution of Temperature in a Massive Infinite Cylinder

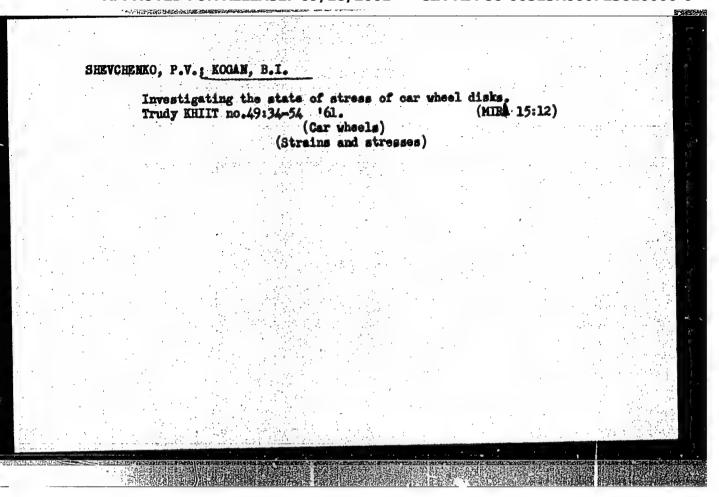
The authom mention A.K. Danilevskiy. There is 1 figure and 1 Soviet reference.

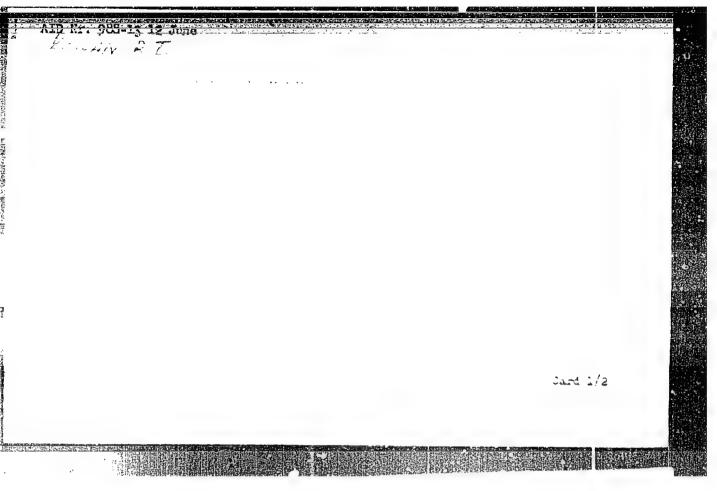
ASSOCIATION: Khar'kovskiy avtomobil'no-dorozhnyy institut (Khar'kov Automobile and Highway Institute)

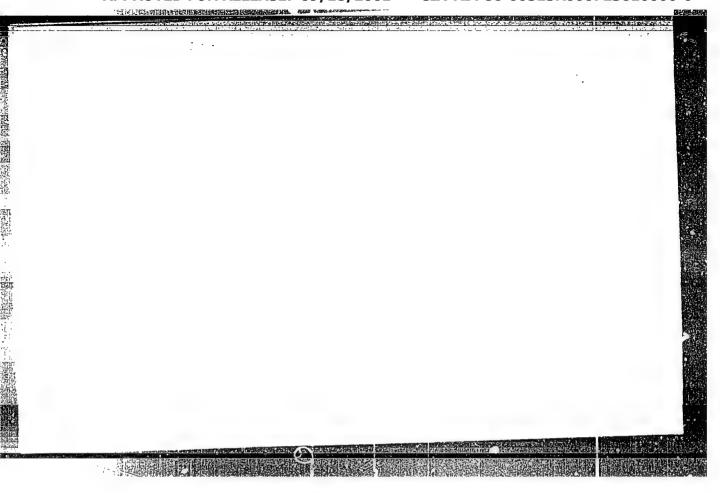
SUBMITTED: November 25, 1958

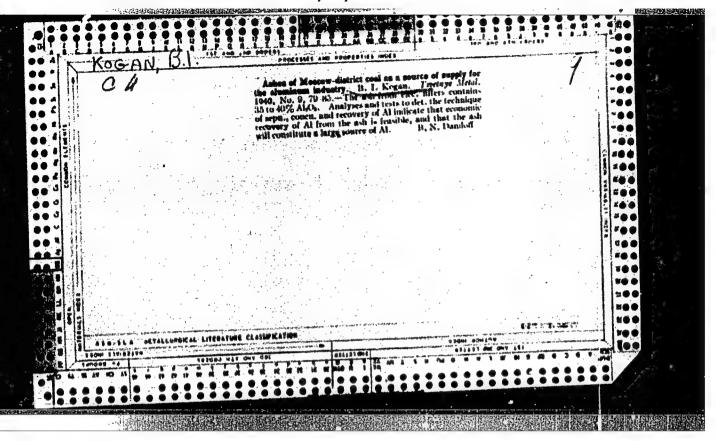
Card 4/4



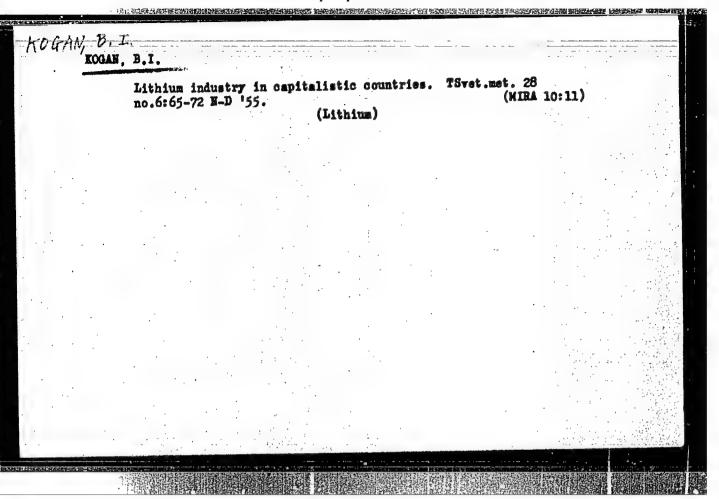


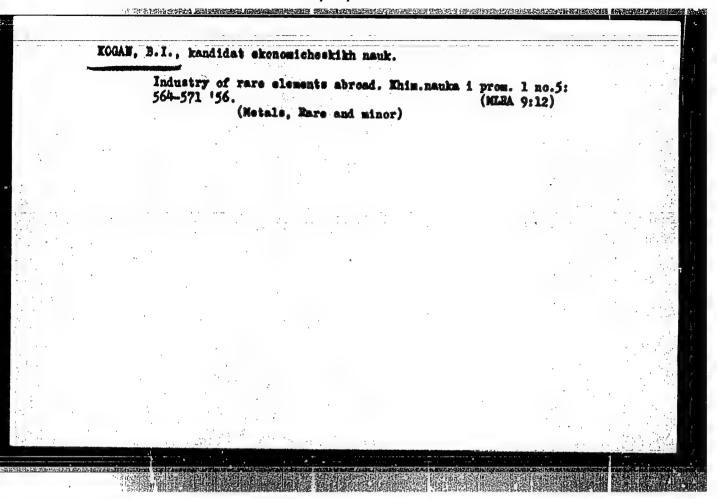


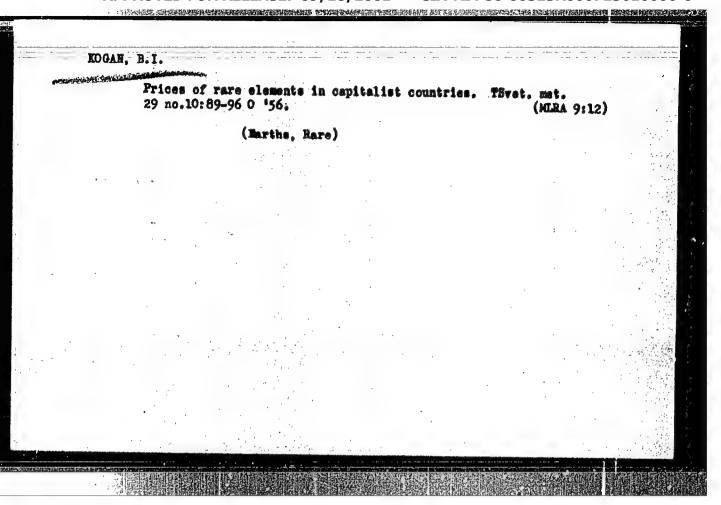




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SOV/137-58-9-20088

-Translation from: Referativnyy zhurnal, Metallurgiya, 1958, Nr 9, p 282 (USSR)

AUTHOR:

Kogan, B.I.

TITLE:

Industrial Applications of Rare Earths (Based on Data in

Foreign Journals) [Primeneniye redkikh zemel' v promyshlen-

nosti (po dannym in. zhurnalov)]

PERIODICAL: Byul. nauchno-tekhn. inform. M-vo geol. i okhrany nedr

SSSR, 1957, Nr 5 (10), pp 24-27

ABSTRACT:

The rare-earth elements (REE) are widely used in nuclear engineering. Ceramic and refractory materials using Ce. La. and other REE have been developed for nuclear reactors. Tu is employed in X-ray apparatus for medical diagnostics and for flaw detection. The REE are employed in metallurgical processes as deoxidizers, degassing agents, and desulfurizers, and also serve well as inoculants, which afford an improvement in the deformability and mechanical properties of various alloys (pig iron, steel, Mg alloys and others). Polishing powders of the REE (chiefly a specially treated Ce oxide) are superior to all known polishing materials. In addition, REE are employed

Card 1/2

to make incandescent carbons, luminescent materials,

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Industrial Applications of Rare Earths (cont.)

pyrophoric alloys, explosives, medicaments, etc. The fields of application of REE in nuclear engineering, ferrous and nonferrous metallurgy, light alloys, glasses, ceramics, refractories, illumination engineering, electrical and electronic engineering, the chemical industry, military engineering, etc., are listed.

E.K.

1. Rare earth elements-Applications

Card 2/2

KOUMN B. I

AUTHOR: Kogan, B. I.

136-6-25/26

TITIE:

The Rare Earth Elements Thulium and Promethium Become Technically Valuable. (Redkozemel'nyse elementy tuliy i

prometly priobretayut tekhnicheskuyu tsennost')

PERIODICAL: Tsvetnyye Metally, 1957, No. 6, pp 92 - 95 (USSR)

ABSTRACT: This is a survey of non-Blavic (mainly American) literature on thulium and promethium. Their preparation, properties and uses are considered. The uses of the former element include flow detection, and the latter is used in miniature batteries. There are 20 references, 4 of which are Slavic.

AVAILABLE: Library of Congress

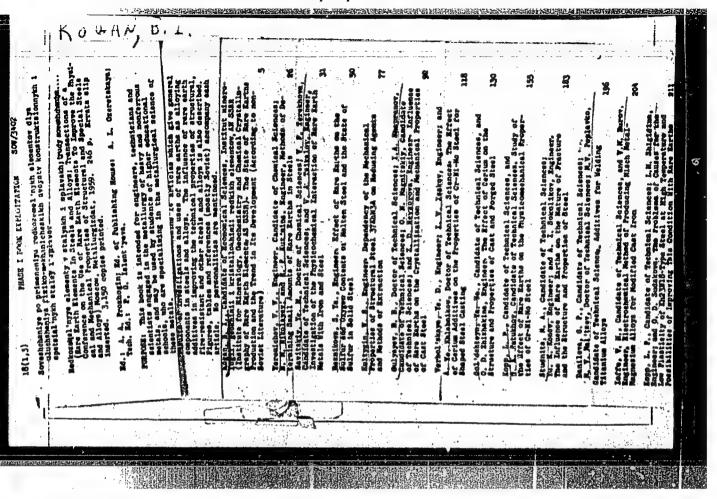
Card 1/1

KOGAN, B.I.

Institute of Geochesistry and Grystalography (and/of ?) Rare Minerals, Academy

"Rare Elements - A New Field of Industry"

K'o-hsuch T'ung-pao (Scientia), June 1958



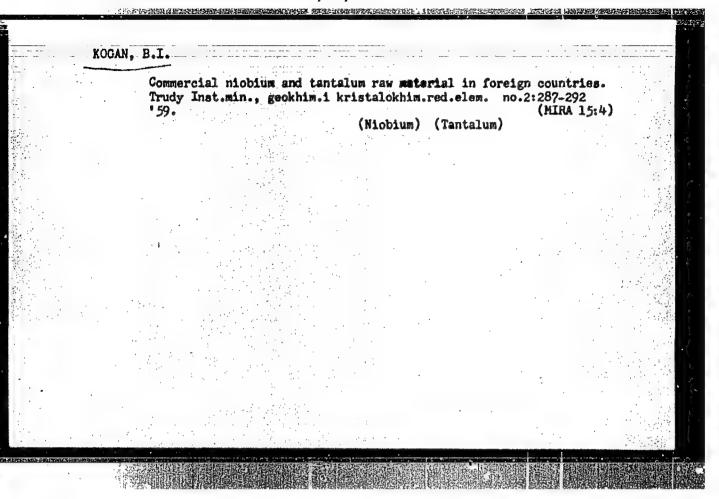
KOGAN, B. I.; GINZBURG, A.I., nauchnyy red.; NEKRASOVA, N.B., red.isd-vs;
IVANOVA, A.G., tekhn.red.

[Onality required by industry in mineral raw meterials; handbook

[Quality required by industry in mineral raw materials; handbook for geologists] Trebovaniis promyshlennosti k kachestvu mineral'nogo syr'ia; spravochnik dlia geologov. Isd.2., perer. Moskva, Gos.nauchno-tekhn.isd-vo lit-ry po geologii i ekhrane nedr. No.41. [Lithium] Litii. 1959. 26 p. (MIRA 12:11)

1. Moscow. Vsesoyuznyy nauchno-issledovateliskiy institut mineralinogo syriya.

(Lithium)



S/081/60/000/012(II)/003/010 A006/A001

Translation from: Referativnyy zhurnal, Khimiya, 1960, No. 12 (II), p. 481, # 48379

AUTHOR:

Kogan, B.I.

TITLE:

Industrial Importance of Rare Earths

PERIODICAL:

Tr. In-ta mineralogii, geokhimii i kristallokhimii redk, elementoy

AN, SSSR, 1959, No. 2, pp. 293-331

TEXT: This is a review concerning: rare earth salts and their application in engineering; recovery of rare earth raw material abroad; information on chemicometallurgical enterprises of rare earth production; assortment of industrial rare earth products manufactured abroad. There are 108 references.

N. Shiryayeva

Translator's note: This is the full translation of the original Russian abstract.

Card 1/1

KOGAN, B.I., kand. ekon. nauk; SAVITSKIY, Ye.M., doktor khim. nauk, red.;
TARAKHOVSKAYA, N.K., otv. red.; SOKOLOVA, N.V., tekhn. red.

[Lithium; fields of established possible application] Litii; oblasti osvoennogo i vozmozhnogo primeneniia. Pod red. E.M. Savitskogo. Moskva, Vses. in-t nauch. i tekhn. informatsii, 1960. 110 p.

(MIRA 14:10)

(Lithium)

KUGAY, Si

PHASE I BOOK EXPLOITATION

SOV/4164

Vsesoyuznoye soveshchaniye po splavam redkikh metallov. 1st, Moscow, 1957

Redkiye metally i splavy; trudy... (Rare Metals and Alloys; Transactions of the First All-Union Conference on Rare-Metal Alloys) Moscow, Metallurgizdat, 1960. 438 p. 3,150 copies printed.

Sponsoring Agencies: Akademiya nauk SSSR. Institut metallurgii; USSR Komissiya po redkim metallam pri nauchno-tekhnicheskom komitete.

Ed.: I.K. Shapovalov; Ed. of Publishing House: O.M. Kamayeva; Tech. Ed.: P.G. Islent'yeva.

PURPOSE: This collection of articles is intended for metallurgical engineers, physicists, and workers in the machine-building and radio-engineering industries. It may also be used by students of schools of higher education.

COVERAGE: The collection contains technical papers which were presented and discussed at the First All-Union Conference on Rare-Metal Alloys, held in the Institute of Metallurgy, Academy of Sciences USSR in November 1957. Results of investigations of rare-metal alloys, titanum, and copper-base alloys with additions of rare metals are presented and discussed along with investigations of rhenium, vanadium, nicbium, and their alloys. The effect of rare-earth metals Card 1/8.

Rare Metals (Cont.)

SOY/4164

on properties of magnesium alloys and steels is analyzed. The uses of rhenium as a dehydrating catalyst, electroplating material, and material suitable for making plugs for automobile electrical systems are discussed. Also, the effect of the addition of certain elements on the properties of heat-resistant steel is examined and alloys with special physical properties (particularly semiconductive alloys) are discussed. No personalities are mentioned. Soviet and non-Soviet references accompany some of the articles.

TABLE OF CONTENTS:

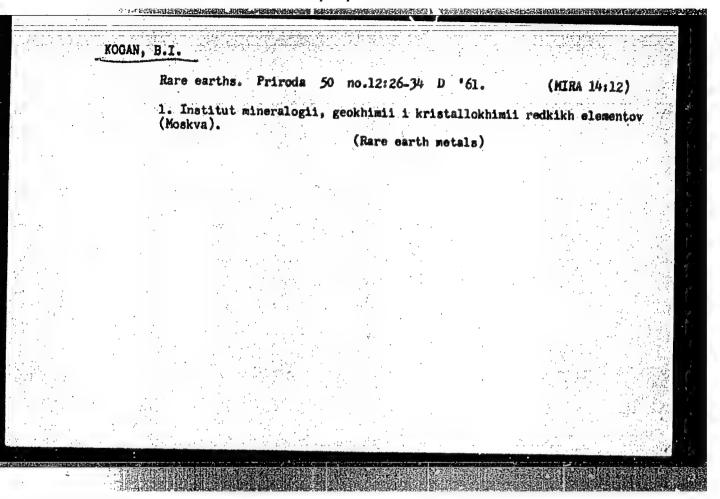
Opening Speech of A.P. Vinogradov, Hember of the Academy of Sciences USSR

The Letter of I.P. Bardin, Member of the Academy of Sciences USSR

PART 1. THE PRESENT STATE OF INVESTIGATION OF RARE-METAL ALLOYS

Savitskiy, Ye.M. The Present State and Problems of Investigations of Rare-Metal Alloys

Fred 7/6



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KOGAN, Boris Iosifovich; ZAOZERSKIY, I.W., saslushennyy deyatel nauki i tekhniki, prof., otv. red.; VLASOV, K.A., glav. red.; POPO-VA, T.S., red. izd-va; PRUSAKOVA, T.A., tekhn. red.; RYLINA, Yu.V., tekhn. red.

[Studies of rare earth from the point of view of economic geology] Ekonomicheskie ocherki po redkim zemliam. Moskva, Izd-vo Akad. nauk SSSR, 1961. 439 p. (MIRA 14:8)

1. Chlen-korrespondent Akademii nauk SSSR (for Vlasov)
(Rare earths)

CUTMAN, A.I.; FLOTNIKOV, N.I.; KOGAN, B.I.

Purification of waste waters from gold recovery plants using various flowsheets. TSvet.met. 34 no.10:28-33 0 '61.

1. TSNIIolovo.

(Gold-Metallurgy) (Sewage-Purification)

KOGAN, B.I.; KAL'ZHANOVA, Ye.G.; SAL'TINA, L.V.; SOLODOV, N.A.;

DMITRIYEVA, O.P.; Prinimali uchastiye: UKHANOVA, N.I.;

PERVUKHINA, A.Ye.; KAZANTSEVA, V.G.; ULANOVSKAYA, V.D.;

VLASOV, K.A., glav. red.; LIZUNOV, N.V., otv. red.;

PYATENKO, Yu.A., otv. red.; SALTYKOVA, V.S., otv. red.;

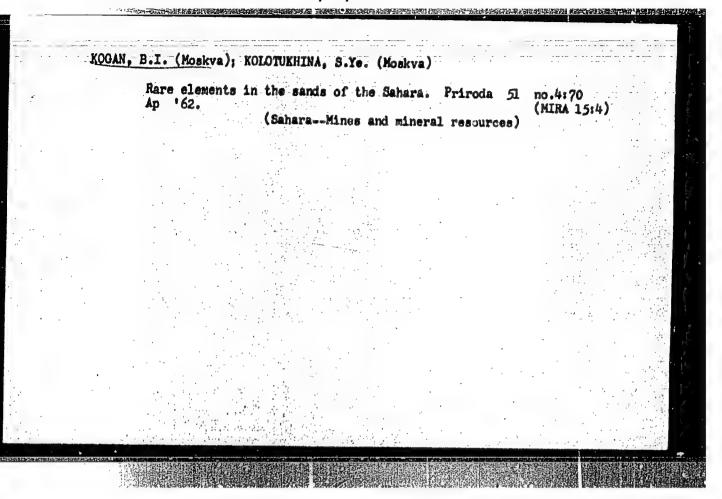
SLEPNEV, Yu.S., otv. red.; FABRIKOVA, Ye.A., otv. red.

PODOSEK, V.A., red. ixd-va; GOLUB', S.I., tekhn. red.

[Rare alkali metals (lithium, rubidium, and sesium); a bibliography on their geochemistry, mineralogy, crystal chemistry, geology, the analytic methods of their determination, and their economics]Redkie shebslochnye metally (litii, rubidii i tsezii); bibliografiia po geokhimii, mineralogii, kristallokhimii, geologii, analiticheskim metodam opredeleniia i ekonomike. Sost. B.I.Kogan i dr. Moskva, Izd-vo Akad. nauk SSSR, 1962. 327 p. (MIRA 16:2)

1. Akademiya nauk SSSR. Institut mineralogii, geokhimii i kristallokhimii redkikh elementov. 2. Chlen-korrespondent Akademii nauk SSSR (for Vlasov).

(Bibliography-Alkali metals)



KCCAN, B.T.; NAZVANOVA, V.A.; KATS, F.A., red.; POPLYAKOVSKAYA,
S.M., red.; LOCINOVA, Ye.I., tekhn. red.

[Possible areas for the use of scandium] Vosmozhnye
oblasti primenenia skandiia. Moskva, 1963. 47 p.
(MIRA 16;11)

1. Moscow. TSentral'nyy institut informatsii tsvetnoy
metallurgii.

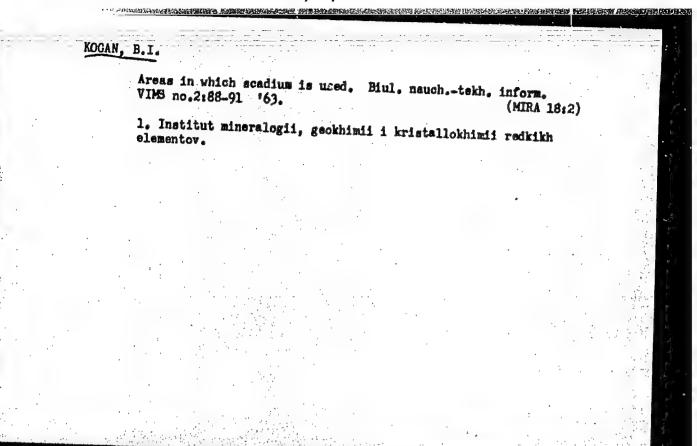
(Scandium)

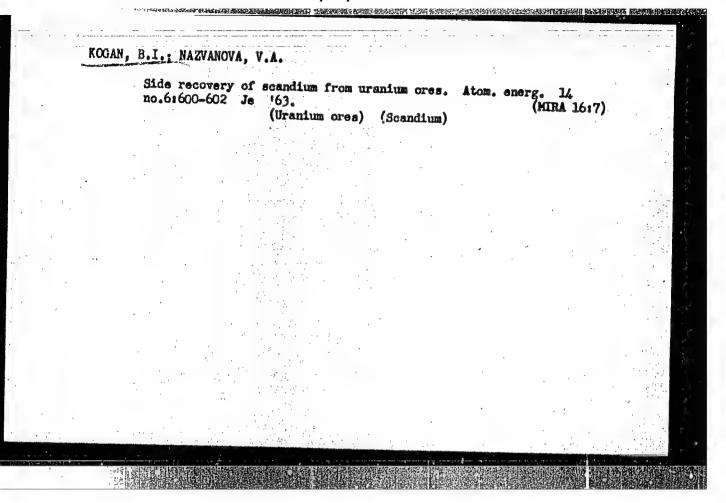
KOGAN, Boris Iosifovich; MAZVANOVA, Valentina Aleksandrovna;
VLASOV, K.A., glav. red.; SRCERBIMA, V.V., doktor geol.miner. nauk, otv. red.; PONOVA, T.S., red.isd-va; RYLINA,
In.V., tekhn. red.

[Scandium; an economic analysis] Skandii; ekonomicheskii
analia. Moskva, Ind-vo AN SSSR, 1963. 303 p. (MIRA 16:8)

1. Chlen-korrespondent AN SSSR (for Vlasov).

(Scandium)





AM4006611

BOOK EXPLOITATION

Kogan, Boris Iosifovich; Nazvanova, Valentina Aleksandrovna

Scandium; an economic analysis (Skandiy; ekonomicheskiy analiz)
Moscow, Izd-vo AN SSSR, 1963. 303 p. illus., biblio. Errata slip
inscrted. 1000 copies printed. At head of title: Akademiya nauk
SSSR. Institut mineralogii, geokhimii i kristallokhimii redkikh
elementov.

TOPIC TAGS: scandium, scandium compounds, scandium organic, rare earth metal, scandium ores, scandium industry, scandium metallurgy, isotopes,

PURPOSE AND COVERAGE: This book is intended for geologists, geochemists, mineralogists, chemists, engineers, metallurgists, economists, and specialists in other fields of science and technology concerned with scandium. The text is a review of the economic importance of scandium based on Western and Soviet literature published during the period 1906-1962 (1062 references taken from 2300 bibliographic entries). Entries which cover scandium in space, in nuclear physics, analytical methods, supplementary literature on

Card 1/2

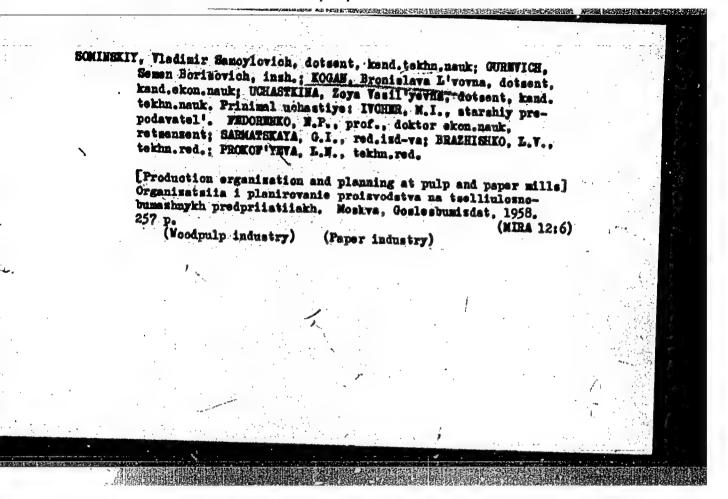
the geology, mineralogy, geochemistry, and chemistry of scandium, etc., will be published in a separate bibliography. The book covers the chemistry of scandium and scandium compounds and scandium technology with particular accent on its use in such modern fields as aviation, rocketry, and electronics. All references to the use of scandium in the field of aerospace are based primarily on U.S. military and industrial sources. Scandium research trends are given in Table 20, pp. 94-95. Better utilization of scandium in modern technology is expected. TABLE OF CONTENTS [Abridged]: Preface 3 Authors' Preface 5 Ch. I. General information on scandium 7 Ch. II. Properties of scandium and its compounds 23		And the second s				1 1 1 2 ·	
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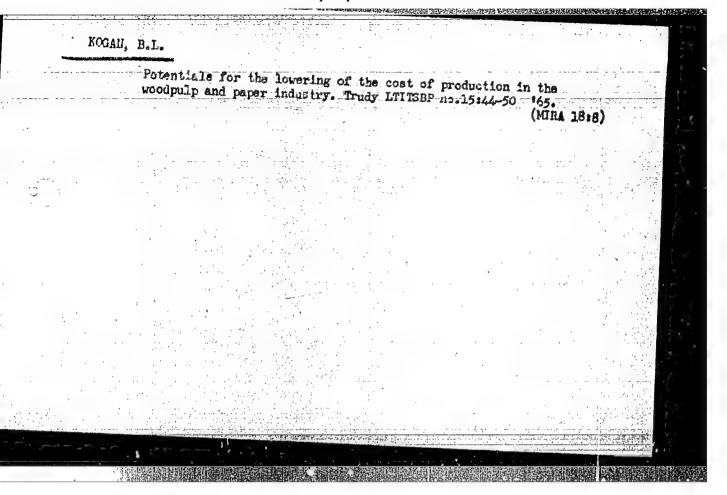
KCGAM, Evonislava L'vorne; SCMINEKIT, Viadimir Samuilovich; TUROVSKIT, P.B., red.; SHITS, V.P., tekhn. red.

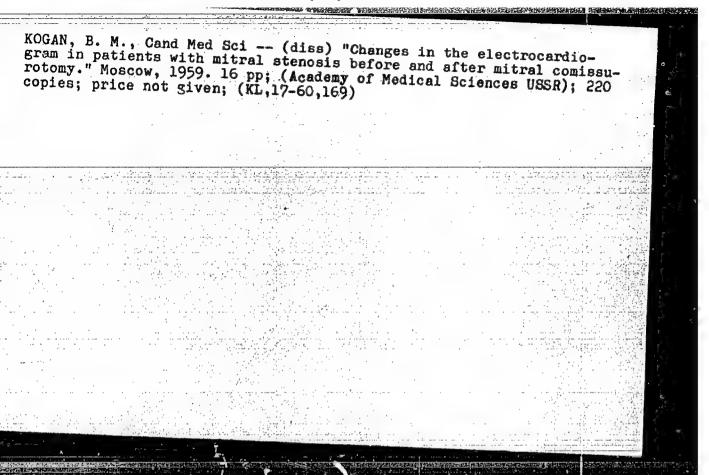
[Means of increasing labor productivity in the woodpulp and paper industries] Puti povyshenica proisvoditel'nosti trada v tselliulos-no-bussahnoi prosyshlemosti. Meskva, Goslesbunisdat, 1957. 54 p. (Moodpulp industry) (Paper industry) (MIRA 11:9)

	Ag 157.	The state of the s	Antigra .	erprises" by A.V. Bum.prom.32 no.8:		
	•	(Woodpulp in	dustry)	(Chirkov, A.V.)		
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APPROVED FOR RELEASE: 09/18/2001 CIA-RDP86-00513R000723610006-6"







KOGAN, B.M. (Moskva, ul. Kachalova, d. 10, kv. 5); KOMAHOV, I.A.

Electrocardiographic changes in pulmonary infarcts developing after mitral commissurotomy. Grudn. khir. 4 no.5:52-53 S-0'62 (MIRA 17:3)

1. Iz laboratorii funktsional noy diagnostiki (zav. - kand. med. nauk G.G. Gel'shteyn) i otdeleniya priobretennykh sabo-levaniy serdtsa (zav. - prof. S.A. Kolesnikov) Instituta grudnoy khirurgii AMN SSSR (dir. - prof. S.A. Kolesnikov, nauchnyy rukovoditel - akademik A.N. Bakulev).

EXCAN, E. M.; KASSIRSKIY, G. I.

Diagnosis of recurrent mitral stenosis. Terap. 34 no.1:19-24
(62. (MIRA 15:7)

1. Is laboratorii funktsional'noy diagnostiki (may. - kandidat meditsinskikh nauk G. G. Gel'shteyn) Instituta serdechnosudistoy khirurgii AMN SSSR (dir. - prof. S. A. Kolesnikov, nauchnyy rukovoditel' - akad. A. N. Bakuley)

(MITRAL VALVE—DISEASES)

APPROVED FOR RELEASE: 09/18/2001 CIA-RDP86-00513R000723610006-6"

ZINGERMAN, L.S.; KOGAN, B.M.; KURILOVICH, Ya.B.

Experimental data on the evaluation of coronarography. Eksper.
khir. 1 anest. 8 no.3129-33 My-Je*63 (MIRA 17:1)

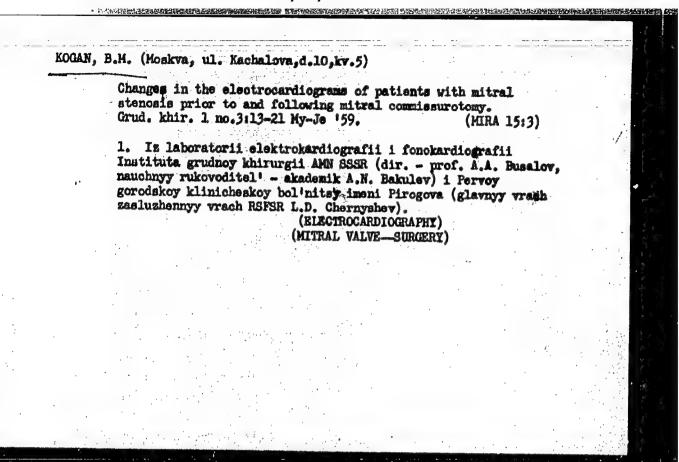
1. Iz Instituta serdechno-sosudistoy khirurgii (dir. - prof.
S.A. Kolemikov, nauchnyy rukovoditel* - akademik A.N.Bakulew)

AMN SSSR.

GEL'SHTEYN, G.G., KOGAN, B.M. (Moskva)

Changes in the electrocardiogram in patients with mitral stenosis during the late postoperative period. Klin.med. 37 no.8:61-67 Ag 159. (HIRA 12:11)

1. Is laboratorii elektrokardiografii Instituta grudnoy khirurgii AMN SSSR (dir. - prof.A.A.Busalov) (CCMMISSUROTOMY, physiology) (NINCTROCARDIOGRAPHY)



KOGAN, B.M.; MURATOVA, Kh.N.

Changes in the electrocardiogram in coronary insufficiency before and after ligation of the internal thoracic arteries. Grud. khir. 3 no.1:67-70 Ja-F '61. (MIRA 16:5)

1. Iz laboratorii funktsional'noy diagnostiki (zav. - kand. med. nauk G.G.Gel'shteyn) i otdeleniya priobretennykh zabolevaniy serdtsa (zav. - prof. S.A.Kolesnikov) Instituta grudnoy khirurgii (dir. - prof. S.A.Kolesnikov, nauchnyy rukovoditel' - akademik A.N.Bakulev) AMN SSSR. Adres avtorov: Moskvz, Leninskiy prospekt, 8, Institut grudnoy khirurgii AMN SSSR. (ELECTROCARDIOGRAPHY) (CORONARY HEART DISEASE) (THORACIC ARTERY—LIGATURE)

BEREZOV, Yu. Ye; KOGAN, B.M.; POTERKINA, Ye.V.; RAKHIMOV, S.R.

Differential diagnosis of chronic coronary insufficiency and esophagitis. Sov. med. 27 no.12:51-55 D'63 (MIRA 17:4)

1. Tz otdaleniya khirurgii sosudov (xav. - prof. Yu. Te. Beresov) i laboratorii funktsional noy diagnostiki (zav. - kand. med. nauk G. G. Gel'shteyn) Instituta serdechno-sosudistoy khirurgii (dir. - prof. S.A. Kolesnikov, nauchnyy rukovoditel' - akademik A.N. Bakulev) AMN SSSR.

POKROVSKIY, A.V.; KASSIRSKIY, G.I.; KOGAN, B.M. Some problems in the diagnosis of acrtic coarctation. Kardiologiia 3 no.5:27-33 S-0 '63. (MIRA 17:9) 1. Iz otdsleniya khirurgii sosulov (zav. prof. Yu.Ye. Berezov) i iz laboratorii funktsional'noy diagnostiki (zav. - kandidat med. nauk G. G. Gel'shteyn) Instituta serdechno-sosudistoy khirurgii (direktor - prof. S.A. Kolesnikov, nauchnyy rukovoditel' - akademik A.N. Bakulev) AMN SSSR.

Changes in the electroencephalography in coronarography. Kardiologiia no.1:69-72 '64. (MIRA 17:10) 1. Laboratoriya funktsional'noy diagnostiki (sav.- kand. med. nauk G.G. Cel'shteyn) i rentgenovskoye otdeleniye (sav.- dotsent M.A. Ivanitakaya) Instituta serdechno-soudistoy knirurgii (dir.- prof. S.A. Kolesnikov, nauchnyy rukovoditel'- akademik M.N. Bakulev) AMN SSSR, Moskva.

KOGAN, B.M.; MUSTAFA KHMED IL'SID

Clinical electrocardiographic changes in surgical treatment of coronary insufficiency (cardiopericardiopexy). Grud. khir. 6 no.4:63-68 Jl-Ag 64. (MIRA 18:4)

1. Laboratoriya funktsional noy diagnostiki (zav. - kand.med.nauk G.G.Gel'shteyn) i otdeleniye khirurgii sosudov (zav. - prof. Yu.Ys.Berezov) Instituta serdechno-sosudistoy khirurgii (dir. - prof. S.A.Kolesnikov, nauchnyy rukovoditel' - akademik A.N. Bakulev) AMN SSSR, Moskva. Adres avtorov: Moskva, V-49, Leninskiy prospekt, d.S. Institut serdechno-sosudistoy khirurgii.

LORIYE, K.M., KOGAN, B.M.

Comparative evaluation of the results of conservative and surgical treatment of myocardial infarction. Grud. khir. 6 no.5:39-44 S-0 (MIRA 18:4)

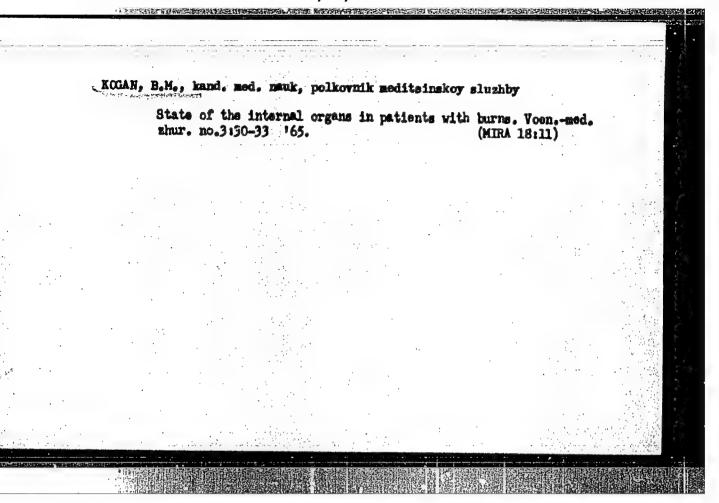
l. Institut serdechno-sosudistoy khirurgii (dir. - prof. S.A. Kolesnikov; nauchnyy rukovoditel' - akademik A.N.Bakulev) AMN SSSR, Moskva.

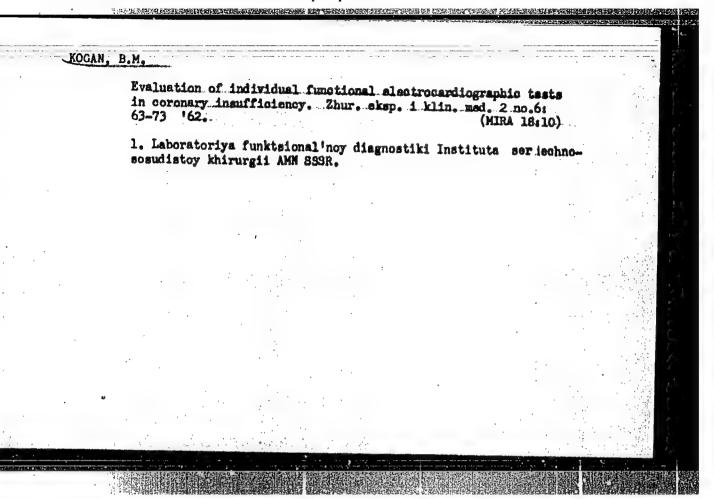
KOGAN, B.M.; MEYTINA, R.A.; POKROVSKIY, A.V.; CHELIKIDI, R.F.

Changes in the functional state of the myocardium, bioelectrical activity of the brain and gas metabolism during surgery for acrtic coarctation.

Vest. khir. no.7:97-102 Jl '64. (MIRA 18:4)

1. Iz laboratorii funktsional'noy diagnostiki (zav. - kand. med. nauk G.G.Gel'shteyn) i otdeleniya khirurgii sosudov (zav. - doktor med. nauk Yu.Ye. Berezov) Instituta serdechno-sosudistoy khirurgii (dir. - prof. S.A.Kolesnikov, nauchnyy rukovoditel' - akademik A.N. Bakulev) AMN SSSR.





PLATONOV, V.M.; REEMO. B.G.; MONKO, Ya.D.; KOGAN, B.O.

Galculating the rectification of mixtures of components having close-boiling points by means of a digital computer. Enim. prom. (MIRA 13:12)

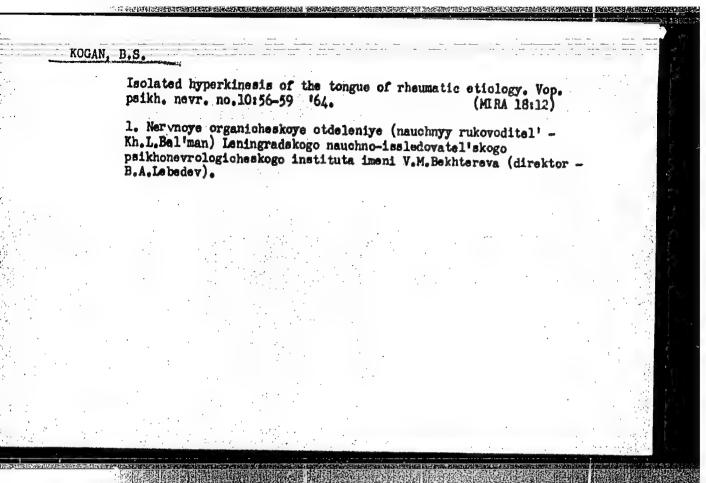
Lamonno-issledovatel skiy institut sintsticheskikh spirtov i organicheskikh produktov. (Distillation, Fractional)

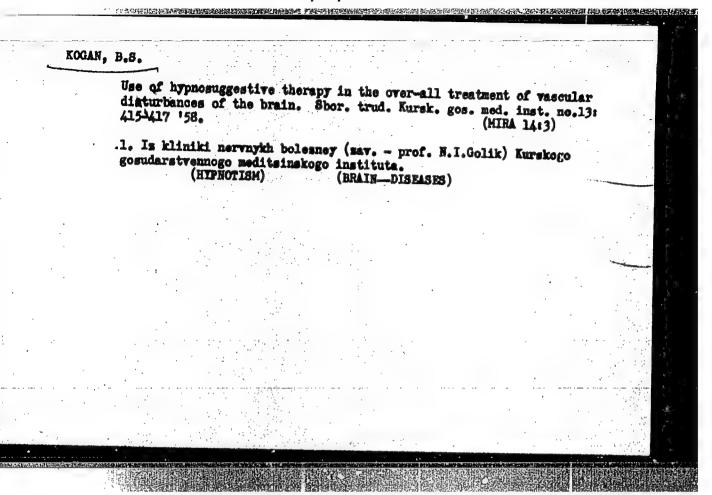
(Calculating machines)

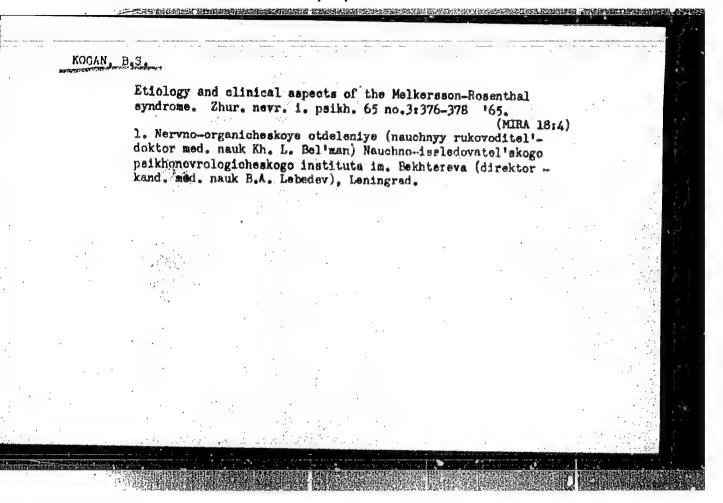
NIKULINA, V.A.; GEZENTSVEY, Z.A.; KOGAN, B.S.

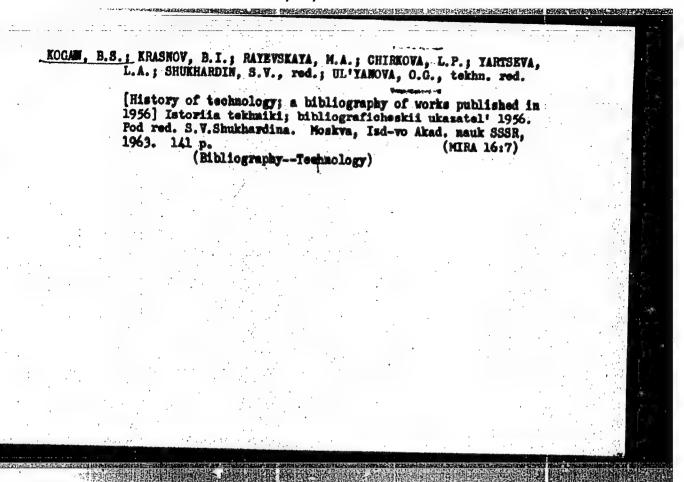
Special methods in the diagnosis of hyperparathyroidism; clinico-roentgenological parallels. Probl. endok. i gorm. 11 no.2141-43 Mr-Ap 165. (MIRA 18:7)

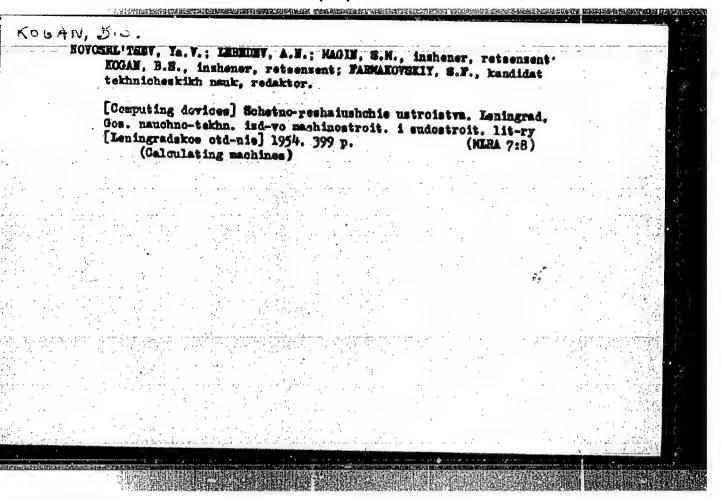
1. Khirurgicheskoye otdeleniye (zav. - prof.O.V.Nikolayev) i rentgenologicheskoye otdeleniye (zav. - prof. M.I.Santotskiy) Vsesoyuznogo instituta eksperimental noy endokrinologii (direktor - prof. Ye.A.Vasyukova), Moskva.











Function of a nickel electrode as oxygen electrode in oxygen-containing salts. Zhur. fiz. khim. 38 no.6:1632-1635 - Je '64. (MIRA 18:3)

1. Ural'skiy politekhnichaskiy institut imeni Kirova.

ZONENSHAYN, L.P.; BERTEL'S-USPENSKAYA, I.A.; SAFRONOV, V.S.; NEYMAN, V.B.;

GENDLER, V.Ye.; CHURIKOV, V.S.; YEREMIN, N.I.; KOGAN, B.S.; YAKOVLEVA,
M.N.; LANGE, O.K.; KABANOV, G.K.; KUZNETSOVA, K.I.; SINITSYNA, I.N.;

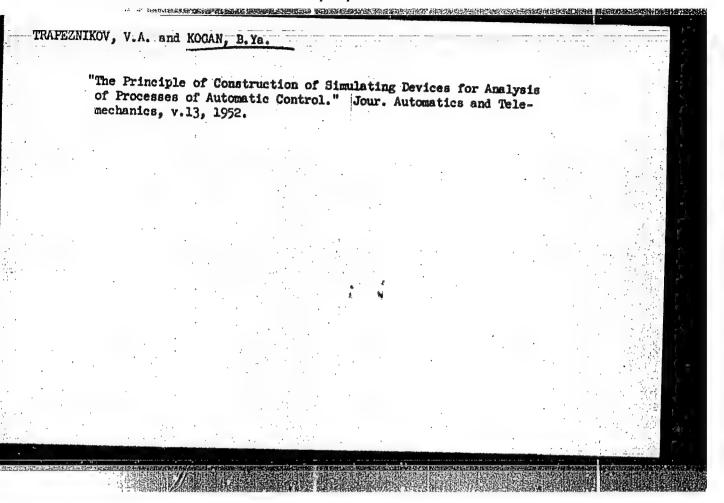
SMIRNOVA, T.N.; VENKATACHALAPATI, V.; MASIAKOVA, N.I.; BELOUSOVA, Z.D.;

YAKUBOVSKAYA, T.A.; YURINA, A.L.; RYBAKOVA, N.O.; MOROZOVA, V.G.;

BARASH, M.S.; FONAREV, V.I.; NIKONOV, A.A.

Activity of the Geological Sections of the Moscow Naturalists' Society. Biul. MOIP. Otd. geol. 39 no.6:127-151 N-D '64.

(MIRA 18:3)



AYZERMAN, M.A., doktor tekhnicheskikh nauk, redaktor; YORONOV, A.A., kandidat tekhnicheskikh nauk, redaktor; KOTEN; MINTOV, V.A., kandidat tekhnicheskikh nauk, redaktor; LETOV, A.M., doktor fisiko-meditsinskikh nauk, redaktor; LETOV, A.M., doktor tekhnicheskikh nauk, redaktor; METENOV, M.V., doktor tekhnicheskikh nauk, redaktor; METENOV, M.V., doktor tekhnicheskikh nauk, redaktor; PENTHOV, B.M., redaktor; SOLODNIKOV, V.U., doktor tekhnicheskikh nauk, redaktor; TERPENIKOV, V.A., redaktor; KERNOV, A.V., kandidat tekhnicheskikh nauk, redaktor; TSYPEIN, Ya.Z., doktor tekhnicheskikh nauk, redaktor; VORONOV, A.A., redaktor; PENTHER, R.S., tekhnicheskiy redaktor.

[Proceedings of the Second All-Union Conference on the theory of automatic control] Trudy vtorogo Vsesdyusnogo soveshchaniia po teorii avtomaticheskogo regulirovaniia.

(Continued on hext card)

AYZERMAN, M.A. doktor tekhnicheskikh nauk, redaktor (Cont'd) Card 2.

Vol.3 [Methods and means of experimental research on systems of automatic control. Bibliography on the theory of automatic control and related problems] Metody i sredstva eksperimental nogo issledovaniia sistem automaticheskogo regulirovaniia. Bibliografiia po teorii automaticheskogo regulirovaniia i smeshnym voprosam.

1955. 351 p. (MLRA 9:1)

1. Chlen-korrespondent AN SSSR(for Petrov, Trapesnikov) 2. Vsesoyusnoye soveshchaniye po teorii avtomaticheskogo regulirovaniya
2d, Moscow, 1953.

(Automatic control) (Bibliography--Automatic control)

KOGAN B. YA.

AYZEHMAN, M.A., dokt. tekhn. nauk, redaktor; VORONOV, A.A., kandidat tekhn. nauk, redaktor; KOGAN, B.Ya., kandidat tekhn. nauk, redaktor; KOTEL'HIKOV, V.A., kandidat tekhn. nauk, redaktor; LETOV. A.M., dokt. fiz.-mat. nauk, redaktor; LOSSEYEVSKIY, V.L., dokt. tekhn. nauk, redaktor; KHRAMOY, A.V., kand. tekhn. nauk, redaktor; TRAPEZNIKOV, V.A., redaktor; MEYEROV, M.V., dokt. tekhn. nauk, redaktor; HAUMOV, B.N., redaktor; PETROV, B.N., redaktor; SOLODOVHIKOV, V.V., dokt. tekhn. nauk, redaktor; TSYPKIN, Ya.Z., dokt. tekhn. nauk, redaktor

[Proceedings of the Second All-Union Conference on the Theory of Automatic Control.] Trudy Vtorogo Vsesoiusnogo soveshchaniia po teorii avtomaticheskogo regulirovaniia. Moskva, Isd-vo Akad.

neut SSSR.[Vol. 1 Problem of continuous and periodic operations in the theory of automatic control] Vol.1 Problem ustoichivosti i periodicheskikh reshimov v teorii avtomaticheskogo regulirovaniis.

1955. 603 p. (NEPA 818)

1. Ohlen korrespondent AN SESE (for Preposentkov, Petrev) 2. Aleadesiya nauk SESE, Institut avtomatiki i telemekheniki.

Translation from: Referativnyy zhurnal. Mekhanika, 1957, Nr 7, p 15 (USSR) SOV/124-57-7-7561

AUTHORS: Trapeznikov, V. A., Kogan, B. Ya.

TITLE:

1.

Modern Methods of Experimental Investigation of Automatic-control Systems (Sovremennyye metody eksperimental'nogo issledovaniya sistem avtomaticheskogo regulirovaniya)

PERIODICAL: Tr. 2-go Vses. soveshchaniya po teorii avtomat. regulirovaniya. Vol 3. Moscow-Leningrad, 1955, pp 7-36

ABSTRACT: An account is given of the essential features of a method for fullscale testing and for physical and mathematical analog simulation of automatic-control systems. Included are circuits and descriptions of the various electronic and electromechanical elements of the latest mathematical analogs (i.e., computing elements, function-transforming elements, multiplier and divider elements, etc.) The authors describe briefly the principles of construction of mathematical analogs and list those that had been brought out by Soviet industry as of 1955; they mention also those built at the Institut avtomatiki i telemekhaniki AN SSSR (Institute of Automation and Telemechanics, Academy of

Card 1/2 Sciences, USSR). Included are general-view photographs of analog

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Modern Methods of Experimental Investigation of Automatic-control Systems

computers of types IPT-4, IPT-5, MPT-9, EMU-2, EMU-3, and EMU-4. The need for broader development of electronic-analog mathematical-simulation methods is emphasized.

Ye. P. Popov

Card 2/2

KOGAN B. YA.

Translation from: Referativnyy Zhurnal, Elektrotekhnika, 1957 112-2-3988 Nr 2, p.208 (USSR)

AUTHOR:

Kogan, B.Ya.

TITLE:

The Electronic Analog Computers of the Institute of Automation and Remote Control of the Academy of Sciences of the USSR (Elektronnyye modeliruyushchiye ustanovki Instituta avtomatiki i telemekhaniki : AN SSSR)

PERIODICAL: Tr. 2-go Vses. soveshchaniya po teorii avtomat. regulirovaniya. Moscow-Leningrad, 1955, Nr 3, pp.47-69, addresses 70-71

ABSTRACT:

An account is given of studies made since 1947, by the Institute to create computers for doing research on automatic control systems (ACS). Problems can be solved on the computers (research on transients in linear ACS with account taken of delays, of the existance of parameters varying in time, and of random disturbances,

Card 1/4

APPROVED FOR RELEASE: 09/18/2001 CIA-RDP86-00513R000723610006-6" The Electronic Analog Computers of the Institute of Automation (Cont.)

as well as nonlinear ACS) to an accuracy of 5 to 10 per cent. The first computer (1949) was able to solve linear differential equations of up to the 10th order, with constant and variable coefficients. Subsequently the DMY-2 computer (1950), designed to solve linear differential equations of up to the 10th order, with constant and variable coefficients and the DMY-3 computer (1951), designed to solve linear differential equations of up to the sixth order, were built. Resolver amplifier circuits of the DMY-3 computer, and circuits of other units of this computer, are discussed. The DMY-4 computer (1952-1953) is designed to solve linear and nonlinear equations of up to the seventh order, with constant and variable coefficients. It contains 14 d.c. resolver driver amplications with automatic zero stabilization, nonlinear computing elements, standard nonlinearity units, etc. Nonlinearities of a type of limiter, zones of insensitivity of free play, of friction, and of relay characteristics, universal function generators and multiplierdivider units are discussed. A device without a photo-

Card 2/4

The Electronic Analog Computers of the Institute of Automation (Cont.)

multiplier, developed in the Institute is described. Its operating principle is based on the passage of an alternating current through the screen of a cathode-ray tube. The multiplying units of the computer are built around diode circuits. When performing the operation of division, either the multiplying unit in the feedback circuit, or the electro-mechanical tracking system in combination with the resolver amplifier, is used. In conclusion, the problems in connection with improved computer equipment and better computer-component properties are indicated. Those who took part in the discussion touched on the problems related to the industrial production of computers, lowering their production cost, and the advisability of developing not only all-purpose, but specialized computers as well (for example, for research on ACS).

Card 3/4

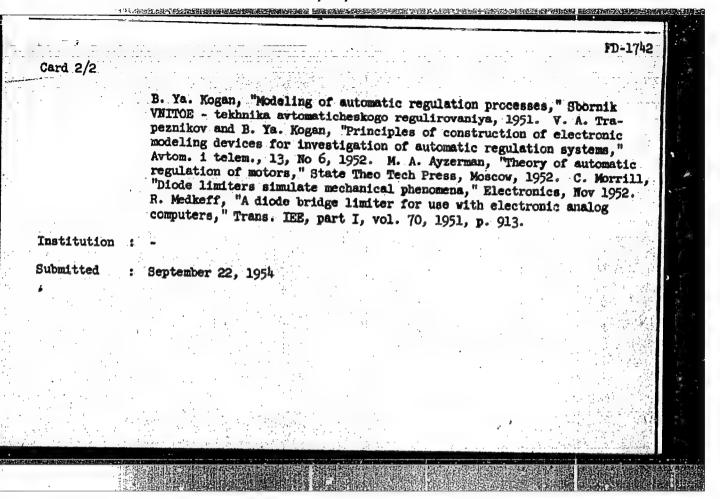
The Electronic Analog Computers of the Institute of Automation (Cont.)

It is pointed out that it will be necessary to produce nonlinear computers. The basic parameters of two nonlinear computers are given: the MH-2, a bench model, contains approximately 500 tubes and is suitable for making studies of systems of up to the sixth order; the MATT-11, (a unit-type construction computer), is designed for system equations of up to the 12th order, consists of individual, small size units and has, in all, 500 tubes not counting power supply sources.

Card 4/4

USSR/Electricity - Regulation FD-1742 Card 1/2 : Pub. 10-1/12 Author Kogan, B. Ya. (Moscow) Title Modeling of automatic regulation systems in the presence of typical nonlinear characteristics Periodical Avtom. i telem., Vol. 16, 113-128, Mar-Apr 1955 Abstract : The author considers the modeling of the circuits in automatic regulation systems possessing typical nonlinear characteristics (limitation of the coordinates in modulus, zone of insensitivity, free play in transmissions, relay characteristics). He shows that the enumerated characteristics must be reproduced by union of resolving amplifier with diode limiter. Procedures are presented for modeling the executor mechanisms taking into account dry friction and free play in transmissions, namely on the basis of use of diode switches and diode limiters in conjunction with resolving amplifiers. Ten references: A. Ya. Lerner, "Improvement of the dynamic properties of automatic compensators by means of nonlinear feedback," ibid., 13, No 2 and 4, 1952. A. A. Feldbaum, "Optimum processes in automatic regulation systems," ibid., 14, No 6, 1953; "Dissertation for Doctor of Technical Sciences," 1948; "Electron model of free play, priority 16 Oct 1951," Zayavka [Claim] No A-918. T. N. "Modeling of electromechanical servo-systems, Trudy nauchno-tekhnicheskoy sessii po elektroprivody [Works of the scientific-technical session on electric drive], State Power Press, 1951.

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"Use of Electronic Simulations Devices for the Investigation of Automatic Regulation Systems" a paper presented at the Conference on Methods of Development of Soviet Mathematical Machine—Huilding and Instrument-Building, 12-17 March 1956.

Translation No. 596, 8 Oct 56

**KOCAN, B. T. and TRAPEZNIKOV, V. A.

"Electronic Models and Their Uses in the Research and Design of Automatic Regulating Systems," a paper read at the Convention on Control Technique, Heidelberg, 24-29 Sep 56.

Inst. Automatics and Telemechanics, Moscos

**KOGAN, B. Ya., (Cand. Tech. Sci.); TRAPEZNIKOV, V. A. (Corr. Mem.)

"Electronic Models, Prospects of their Development and Utilization in Automatics,"

Paper read at the Session of theAcad. Sci. USSR, on Scientific Problems of Automatic Production, 15-20 October 1956.

Avtomatika i talemekhanika, No. 2, p. 182-192, 1957.

9015229

KOGAN, B. VA.

"Electronic Modeling Installation Type D41-5," by V. A. Trapeznikov, B. Ya. Kogan, V. V. Gurov, and A. A. Masolv, Pribory i Stendy, Institut Tekhniko-Ekonomicheskoy Informatsii, Akademiya Nauk SSSR, Theme 10, No P-56-422, 1956

This 120-page book describes the construction, performance, and capallities of the EMU-5 analog computer. It has several block and circuit

It was at the Institute of Automatics and Telemechanics, Academy of Baiences USSR, that the new EMJ-5 electronic analog computer was developed under the direction of V. A. Trapeznikov and B. Ya. Kogan, in which the abortcomings of the former models (EMJ-1, 2, 3, and 4) have been eliminated to a greater degree. The following persons were engaged in developing various components of the computer: V. V. Gurov and V. M. Yevseyev -- the linear unit of the computer; A. D. Talantsev, A. A. Maslov, and F. Ye. Talantsev, and A. Maslov, and F. Ye. Tional converter; and L. M. Barilenko and A. Ye. Kyaksht -- the power unit. Structural design was executed by Ye. D. Afonina, L. M. Barilenko, Ye. A. Cheglokov, P. A. Anikeyev, and P. V. Tikhonov.

The computer is designed to solve linear and nonlinear differential equations through the sixth order, with constant and variable coefficients machine has provisions for hook-up with auxiliary units and other complex problems having equations of a still light order.

sum. 1360

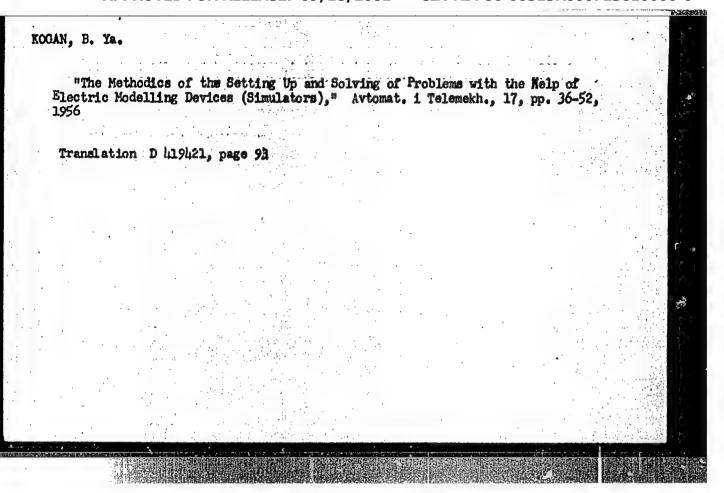
KOGAN, B.Ya.

"Concerning the Theory of Nonlinear Functional Elements Employing Straight Line Approximation," by B. Ya. Kogan, Avtoratika i Telemekhanika, No 12, Dec 56, pp 1081-1091

Fundamental relationships are derived for a functional amplifier with the nonlinear conductivity approximated in steps. Some methods for the synthesis of function generators with diode elements are considered from the standpoint of minimization of the current steepness characteristics.

These methods provide a reduction of the error of a function converted and permit the class of the generated functions to be extended. A method was presented to determine current characteristics of diode circuits with respect to the steepness characteristics.

SUM. 1287



KUSHM, 12 111.

TOPCHIYEV, A.V., akademik, glavnyy redaktor; PETROV, B.W., otvetstvennyy redaktor; AYZERMAH, M.A., redaktor; BERNSHTEYN, S.I., redaktor; VASIL'YHV, R.V., redaktor; IVAHOV, Y.I., redaktor; KARAGODIN, V.M., redaktor; KOGAN, B.Ya., redaktor; LETOV, A.M., redaktor; PORTHOV. SOKOLOV, Yu.F., redaktor; SOLOLOVNIKOV, V.V., redaktor; ULAHOV, G.M., redaktor; TSUPKIN, Ya.Z., redaktor; ERUTOVA, I.M., redaktor; ASTAF'YEVA, G.A., tekhnicheskiy redaktor

[A mession of the Academy of Sciences of the U.S.S.R. on scientific problems in automatisation of production, October 15-20, 1956; principal problems of automatic control] Sessiia Akademii nauk SSSE po manchnym problems avtomatisatsii proisvodstva, 15-20 oktiabria 1956 g.; osnovnye problemy avtomaticheskogo regulirovaniia i upravleniia. Moskva, 1957. 334 p. (MIRA 10:5)

1. Adakewiya nauk SSSR. 2. Chlen-korrespondent AN SSSE. (for Petrov) (Automatic control)

APPROVED FOR RELEASE: 09/18/2001 CIA-RDP86-00513R000723610006

KOGAN, B.Ya.

Investigation of nonlinear automatic control systems by the methods of mathematical modeling. Itogi nauki: Tekh. nauki no.1:173-229 '57.

(Automatic control) (Mathematical models)

KOGAN, B. YA

103-9-6/9

AUTHOR:

On the Evaluation of Integrating Electron-Devices (Ob otsenke ale-

TITLE

ktronnykh integriruyushohikh ustroystv)

PERICDICAL:

Avtomatika i Telemekhanika, 1957, Vol. 18, Nr 9, pp. 841-846(USBR)

ABSTRACT

An evaluation and a comparison of the quantities on min (minimum permitted frequency of the sinusoidal input signal) and twax (maximum permitted time for the integration of the step signal) for the three basic types, i.e. with a passive circuit at the amplifier input, with a parametric compensation of the error, and with a negative feedback -, as well as the explanation of the influence exercised by individual primary faults and the finity of the dynamic domain upon the quantities & min and tmax are given. It is shown that the application of passive integrating circuits with amplifier is purposeful from an input-signal-frequency of 20 c and more. With a necessity of having to integrate signals of very low frequency, it is necessary to go over to operators. The factor determining the quantity & min for all three types is the phase error. An exception is formed by those devices which are fitted with stabilised operators, in which the determining factor will be the finity of the dynamic domain Kp! The maximum permitted time of integration for a stepped input signal is, in the case of all three types (with the exception of that with stabilized operators) determined by the errors of method. The operators have the longest integration time.

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CIA-RDP86-00513R0007236

KOGAN, A. YA.

AUTHORS TITLE Vil'dt, Ye.O., Landsberg, R.S., Kogan, B.Ya.

Bibliography. A List of Soviet-, and Foreign Literature Dealing with Problems of Mathematical Computation (Modelling) for the Year. 1955.

(Bibliografiya. Spisok otechestvennoy i inostrannoy literatury po voprosam matematicheskogo modelirovaniya za 1955 g.-Russian)

Avtomatika i Telemekhanika, 1957, Vol 18, Nr 9, pp 859-872 (U.S.S.R.)

PERIODICAL

ABSTRACT

The list contains: 1)Books, 2)Publications by congresses and conferences, 3)General theoretical problems: a) General problems, b) Hethods of solving problems by means of modelling devices, c)Precision of operation of modelling devices and their elements, 4)Modelling electron devices consisting of individual computation elements, 5) Computation elements of modelling electron devices: a)Direct current electron amplifiers, b) Computation amplifiers without tubes, c) Multiplication-and devision-devices, d) Function-transformers, e)Other computing elements, 6)Electromechanical modelling devices (electromechanical continuous computers, 7) Special continuous computers: a) Devices for the solution of systems of algebraic equations, extraction of roots, b) Correlators, c) Trenajeurs (simulators), 8) Devices for the transition of a cipner code to physical quantities and vice versa, 9) Comparison of oipher machines and analogies. 10) Auxiliary devices, 11) Application of modelling devices: a)For the solution of problems connected with automatic control,b) Application of modelling devices and their elements in aeronautics, c) Application of modelling devices and their elements for the so-

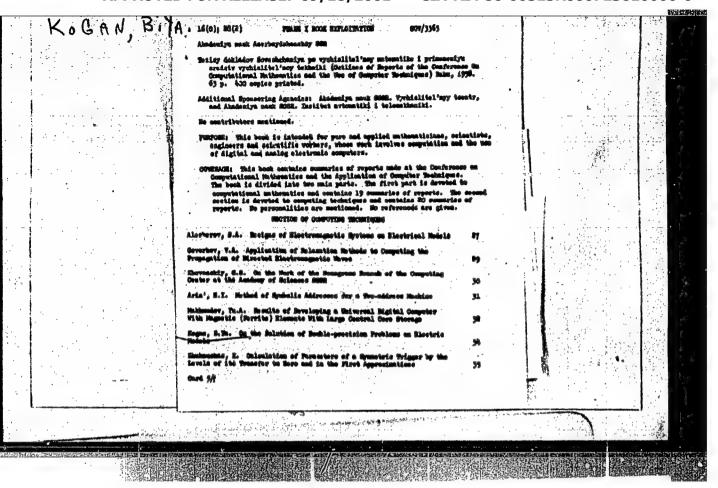
Card 1/2

Bibliography. A List of Soviet-, and Foreign Literature 103-9-9/9 Dealing with Problems of Mathematical Computation (Modelling) for the Year 1955.

lution of various problems.

Card 2/2

Library of Congress.



sov/30-58-7-12/49

AUTHORS:

Kogan, B. Ya., Maslov, A. A.,

Polonnikov, D. Ye.

TITLE:

Electronic Modelling Apparatus of the Type EMU -8A (Elektronnaya apparatura modelirovaniya tipa EMU -8A)

PERIODICAL:

Vestnik Akademii nauk SSSR, 1958, Nr 7, pp. 69 - 74 (USSR)

ABSTRACT:

Such devices are increasingly used in connection with the solution of various scientific and technical problems. Their use in the form of elements of complicated automatic systems is also projected. The apparatus EMJ-9A demonstrated at the International Exhibition in Brussels is the most recent modification of the type EMU-8A and is destined for the investigation of both linear and non-linear systems. These two apparatus were worked out in the Institute of Automation and Telemechanics (Institut avtomatiki i telemekhaniki) under the supervision of V.A. Trapeznikov and B. Ya. Kogan. Besides, the authors of this article, V.V.Gurov and F.Ye.Tranin took part in this work. This apparatus is designed according to the block-principle (see Fig 1) in which case each block guarantees - according

card 1/3

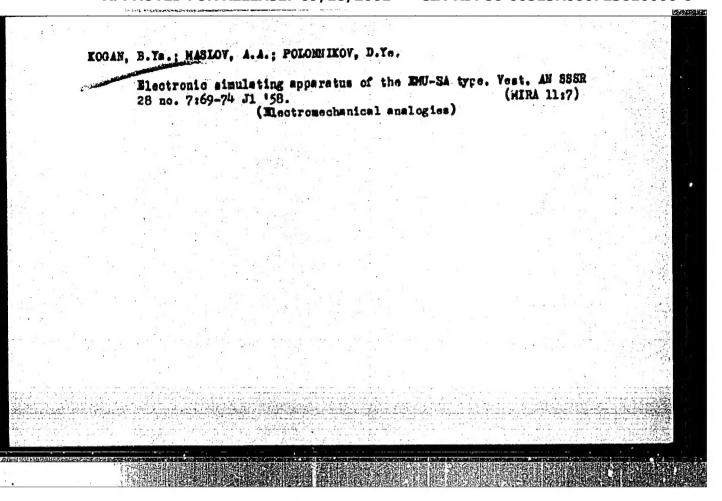
APPROVED FOR RELEASE: 09/18/2001 CIA-RDP86-00513R000723610006-6" Electronic Simulator Apparatus of the Type EMU-8 A

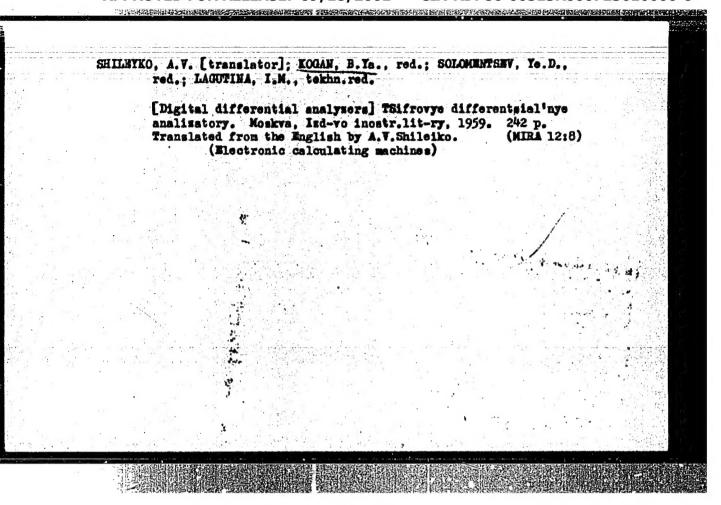
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to its limitations - the solution of both linear and non-linear differential equations up to second order inclusively. Complicated problems may be solved by connecting some fundamental blocks provided with the necessary units. The power consumption of a unit amounts to 140 W, its full weight is 36,8 kg. Its dimensions are: 320 mm high, 450 mm wide and 460 mm deep. It operates with an error of from 0,5 to 1%. The basic scheme of the solving amplifier which differs from that worked out by V.M. Yevseyev, is given in figure 2. Figure 3 shows the basic scheme of the multiplication device. A special control desk was developed according to the scheme given in figure 4 for its adjustment. The diode circuits of the transformer are given in figure 5. As no stabilized supply voltage is required and because of the block structure and because of improved technical characteristics this apparatus can be used also as an element in complicated automatic systems. There are 5 figures and 2 references, 1 of which is Soviet.

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PHASE I BOOK EXPLOITATION

SOV/2201

Kogan, Boris Yekovlevich

Elektronnyye modeliruyushchiye ustroystva i ikh primereniye dlya issledovaniya sistem avtomaticheskogo regulirovaniya (Use of Electronic Analog Computers in the Analysis of Automatic Control Systems) Moscow, Fizmatgiz, 1959. 492 p. 10,000 copies printed.

Ed.: O. K. Sobolev; Tech. Ed.: N. Ya. Murashova.

FURPOSE: This book is intended for persons interested in electronic analog computers who are familiar with the theory and practice of automatic control and the basic principles of electronics.

COVERAGE: The contents of this book are confined to a datalled study of direct current electronic analog computers and their basic computing elements and to problems of applying analog computers to dynamic automatic control systems. The book is based on the assumption that the operational amplifier has idealized frequency characteristics, i.e., its transfer function in the open-loop state is a constant number equal to the amplification coefficient.

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